

Amendments to the Abstract:

Please replace the previous Abstract with the following redlined Abstract:

A photo transistor has an active region (24) spaced from a source (28) by barrier (26). A drain (20) is laterally spaced from the active region (24). Light incident on the active region creates electron-hole pairs. Holes accumulate at the barrier and modulate the effective barrier height to electrons. A gate reset voltage then is applied to gate (4) which lower the barrier allowing the holes to escape.